California's Covered Electronic Waste Recycling Program

Stakeholder Workshop November 5, 2007

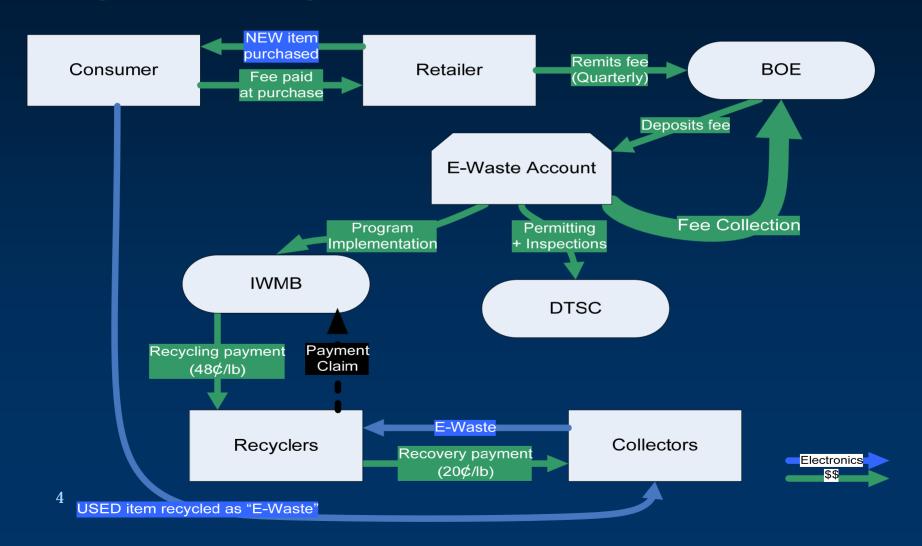
Meeting Fundamentals

- Welcome
- Introductions
- Agenda Review
- Ground Rules
- Internet Participants:
 - -ewaste@calepa.ca.gov

Electronic Waste Recycling Act

- •Intended to fund the recycling of certain electronic waste:
 - -Cathode ray tubes (CRT) televisions and computer monitors);
 - -Liquid Crystal Display (LCD) televisions and monitors;
 - -Laptop computers;
 - -Gas plasma display televisions
 - -Personal DVD players (July 1, 2007)

Payment System at a Glance



Who's Participating?

- 600 approved collectors
 - -~47% CA Corporations / LLCs
 - -~17% Individuals / Sole Props
 - -~13% Local Government Agencies
 - -~10% Non-CA Corps / LLCs
 - -~10% Non-Profits / Schools
 - -~ 3% Partnerships
- 60 approved recyclers

Program Revenue

\$41 million in FY 2004/05

\$78 million in FY 2005/06

\$78 million projected* for FY 2006/07

\$83 million projected* for FY 2007/08

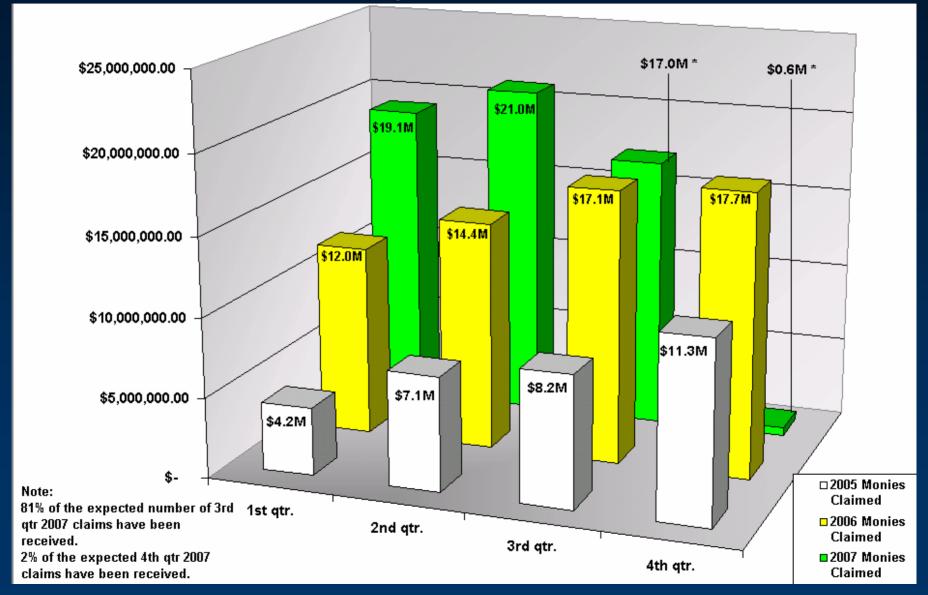
(*Projected program revenue derived from Governor's proposed budget for FY 2007/08)

Program Volumes & Payments

- •FY 2004/05
 - -\$11.4 million claimed (~24 million lbs)
 - -\$10.1 million paid
- •FY 2005/06
 - -\$45.9 million claimed (~95 million lbs)
 - -\$44.8 million paid
- •FY 2006/07
 - -~\$75 million claimed (>155 million lbs)

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Claim Volume Since January 1, 2005



Compliance

- CIWMB & DTSC share responsibilities
 - -CIWMB authority over payment system
 - Enforcement through denial of payment
 - Enforcement through approval revocation
 - -DTSC authority over hazardous materials
 - Facility inspections
 - Enforcement action for HW violations
 - -Joint efforts to detect and deter fraud
 - CIWMB/DTSC MOU
 - Cooperation on investigations

Future Challenges

- CRT Glass Markets Uncertain
 - -Glass-to-glass is waning
 - CRT technology is being replaced
 - -Smelter flux continues
 - Few domestic operations
- Markets for new technologies still need to be developed
 - -LCD & plasma residuals

Future Challenges

OTA Digital Broadcasting

- -20% of households rely on over-the-air (OTA) for reception
- -February 17, 2009 change to digital
- -Analog receivers obsolete w/o converter
- -Cable and satellite unaffected
- -Volume of discards large, uncertain
 - FCC coupons for signal converters
 - •New technology cheaper, more attractive

Future Challenges

No Free Lunch: Who Pays for Non-CEWs?

- -Mixed e-waste volumes increasing
- -Collectors/recyclers expected to handle
- -No effective restrictions on export
- -Recyclers in bidding war
 - •Lower costs = higher collector payments
 - Domestic "de-manufacturing" expensive
 - •Can generators put money where mouth is?
 - Should CEW universe expand?

Net Cost Reporting

- Approved participants must submit annual reports as/if directed by CIWMB
- Next report due March 1, 2008
 - -Too much non-compliance on past reports
 - -Vital that information is timely
 - -CIWMB will discipline scofflaws
- Guidance available through web

Net Cost per Pound (2005)

		Weighted Average	Mean	Median	Percentage Below Standard Payment Rate
Recovery	Revenue	3.9	3.8	0.0	NA
	Cost	21.0	24.6	17.9	NA
	Net Cost	17.1	20.8	15.3	63%
Recycling	Revenue	5.7	5.5	5.1	NA
	Cost	30.9	39.1	31.8	NA
	Net Cost	25.2	33.6	27.5	50%

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Net Cost per Pound (2006)

		Weighted Average	Mean	Median	Percentage Below Standard Payment Rate
Recovery	Revenue	2.0	2.3	0.4	NA
	Cost	18.7	17.2	15.0	NA
	Net Cost	16.7	14.9	14.2	66%
Recycling	Revenue	5.8	6.2	5.3	NA
	Cost	27.4	37.2	29.0	NA
	Net Cost	21.5	31.0	23.5	64%

Comparison of Weighted Average Net Cost

	2005	2006 (Preliminary)	Difference
Recovery	17.1	16.7	-3%
Recycling	25.2	21.5	-15%

Net Costs vs. Payment Rates

- So, what do report trends mean?
- •CIWMB must reconsider "payment schedule" on July 1, 2008
 - -Should rates change?
 - -Should rates differ with type of CEW?
- Regulations govern what is reported
 - -It's only one source of information
- Statute limits what can be considered

Recovery Payment

•PRC 42477. (a) ... on July 1 every two years thereafter, the board in collaboration with the department shall establish an electronic waste recovery payment schedule for covered electronic wastes generated in this state to cover the net cost for an authorized collector to operate a free and convenient system for collecting, consolidating and transporting covered electronic wastes generated in this state.

Recycling Payment

•PRC 42478. (a) ... on July 1 every two years thereafter, the board, in collaboration with the department, shall establish a covered electronic waste recycling payment schedule for covered electronic wastes generated in this state to cover the average net cost for an electronic waste recycler to receive, process, and recycle each major category, as determined by the board, of covered electronic waste received from an authorized collector. ...

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Break?

Operational Concerns

- Net Cost Reporting Compliance
- Application Information Maintenance
- Documentation: Collection Claim
- Designated Approved Collectors
- Collector-Recycler Relations
- Un-Approved Handlers
- Due Diligence

Burden of Handling Non-CEWs

Payments in Excess of Standard Recovery Payment Rates

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Break?

Collector - Recycler Relations

Commodity Markets

Wild Card Matters

Re-Use

How has SB 20 impacted the electronic reuse industry?

Thanks, and travel safely....



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